

AN OBJECT ORIENTED MICROFLUIDIC DESIGN METHOD AND SYSTEM

ABSTRACT OF THE DISCLOSURE

The present invention provides for the design of a microfluidic system,
5 including a microfluidic chip or circuit, using an object oriented microfluidic computer aided
design system. In an embodiment of the present invention, in a computer system having a
computer memory and an object-oriented environment, a method for physically laying out a
microfluidic circuit, having a plurality of microfluidic components is provided. First, a first
symbol object representing a microfluidic component is placed, where the first symbol object
10 includes a fluid channel object which represents a first fluid channel of the microfluidic
component. Next, a connecting fluid channel object on a channel layer is placed, where the
connecting fluid channel object represents a second fluid channel used to connect two
microfluidic components of the plurality of microfluidic components. The fluid channel
object is then linked to the connecting fluid channel object, where the linking represents
15 connecting the first fluid channel to the second fluid channel.

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